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Master's and Doctoral Thesis Citations: Analysis and Trends of a Longitudinal Study

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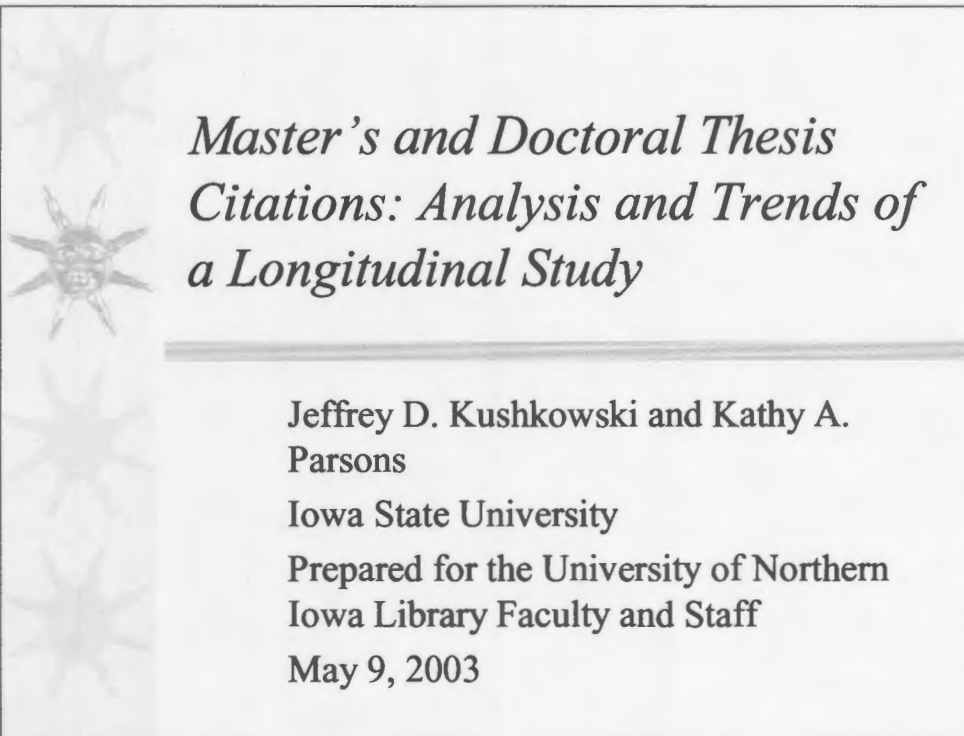
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Kathy

Thank you for coming! We hope you will find this presentation informative.

Bill Wiese the Veterinary Medical Librarian was also participant in the article to be published.



Master's and Doctoral Thesis Citations

- ★ History and Background Research
- ★ Data
- ★ Important Findings
- ★ Future Research Directions
- ★ Questions

Kathy

Discuss format of presentation.

Please ask question at any time.



Master's and Doctoral Thesis Citations-History

★ Formerly known as
one of Kathy's Follies
or Her Holy Grails

★ Judy Reynolds,
"Master's Candidates'
Research Skills,"
Research Strategies 5,
no. 2 (1987): 78-89.



Kathy

I only do projects that take forever--Case in point was the book length bibliography of Susan Sontag. I will admit to a 10-year involvement.

Untenured faculty needing an empirical research project. Thought replicating the Reynolds study would be easy??



Master's and Doctoral Thesis Citations-History

- ★ Initial data gathered from theses published from 1973-1987; recorded on index cards
- ★ Data was gathered from every 20th thesis and every 5th citation
- ★ Brick wall with amount of data and time crunch for tenure
- ★ Dust collector for years



Kathy

Thousands of citations and data elements.

Huge data set requiring major keypunch time
(olden days—no pc based statistical package)

Bit off too much to get done in a short time.

Boxes of Index Cards became a discussion
item whenever someone visited my office.



Master's and Doctoral Thesis Citations-History

- ★ Renewal of project and added contributors to the cause
- ★ Additional data gathered from 1988-1992 theses; recorded on photocopies
- ★ Data input into excel spreadsheets and clean-up of data
- ★ Preliminary data analysis and clean-up



Kathy

1997 renewed project with additional contributors—Jeff and Bill Wiese.

Extended the time frame of study to 20 years to make the data more current.

Technology much improved—used excel spreadsheets to convert data elements to machine readable form. Much easier than keypunching cards.

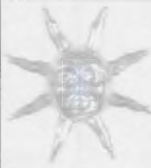
Presented a preliminary paper of this study at the 2000 ILA/ACRL Spring Conference.



Master's and Doctoral Thesis Citations- What Do We Hope to Learn?

- ★ What are the demographic characteristics of the data?
- ★ What are the trends between selected data elements such as citation age in broad disciplinary categories?
- ★ What are the differences between master's and doctoral theses?

Kathy



Master's and Doctoral Thesis Citations- What Do We Hope to Learn?

- ★ What longitudinal trends are present for different indicators, e.g. citation age, total number of citations, length of thesis, etc.?
- ★ What insights about the social structure of knowledge are gained by studying graduate citation patterns?
- ★ What are the implications of this research and what future study is needed?

Kathy



Master's and Doctoral Thesis Citations- Social Structure of Knowledge

★ Role of a graduate thesis

- Substantial subject knowledge (M.A./M.S.)
- Original Contribution (Ph.D.)

★ Social role of thesis

- Validates entry into profession
- Indication that research methodology has been passed on

Kathy



Master's and Doctoral Thesis Citations- Social Structure of Knowledge

- ★ Two types of knowledge
 - Subject knowledge, e.g. Biology
 - Social knowledge, e.g. how Biologists act
- ★ Knowledge of the culture of the disciplinary area, the behavioral and political process in which education takes place, is as important as substantive knowledge of an academic field
- ★ Educational process instills both substantial subject knowledge and cultural norms of the field

Jeff

Research methodology

Behavioral expectations, e.g. publications vs. presentations

“Office politics”



Master's and Doctoral Thesis Citations-The Data Elements

- ★ Thesis number and citation number
- ★ Degree-Masters or Ph.D.
- ★ Department and/or Major
- ★ Date of thesis and date of citation
- ★ Format of item cited-periodical, book, etc.
- ★ Ownership
- ★ ISSN numbers

Kathy

Each thesis was assigned a tracking number as well as each citation.

Ownership was determined to the issue level of periodicals.

ISSN numbers was gathered to determine heavily used periodicals.

More data recorded than needed for initial analysis-hope to have spin off studies and for backtracking if there were errors that needed correcting.



Master's and Doctoral Thesis Citations-The Data

- ★ 629 Theses sampled
- ★ 46,742 individual citations
- ★ 9,102 ca. 20% selected for analysis
- ★ 57 Departments and 113 Majors represented
- ★ 41% Master's/ 59% Ph.D. Theses
- ★ Lots (!) of little index cards and photocopied bibliographies

Jeff

Kathy: The cards were not little but 4 by 6!!!



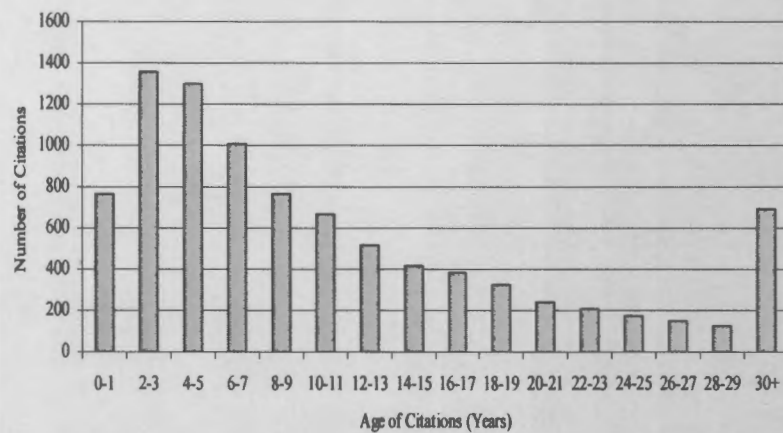
Master's and Doctoral Thesis Citations-Demographics

Material Format	Percent Total
Journal	63.6
Monograph	23.7
Report	4.0
Proceeding	3.0
Thesis	2.6
Other	3.1
Total	100.0

Jeff



Master's and Doctoral Thesis Citations-Age Distribution of Citations



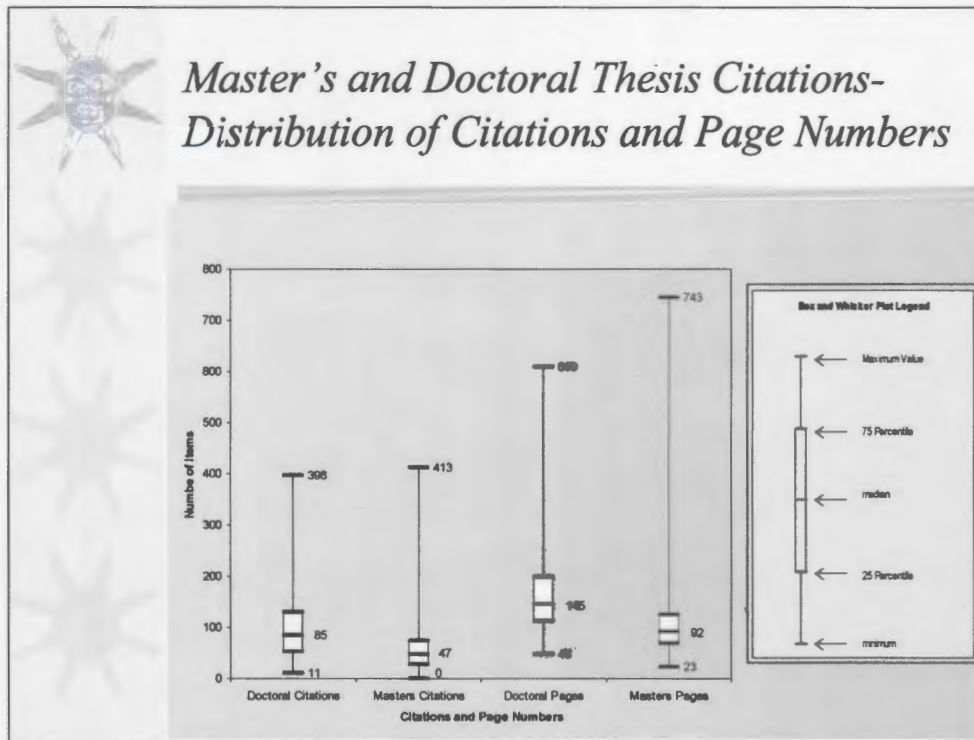
Jeff

50% less than 10 years old

70% less than 13 years old

Range was 350+ years

30+ category includes 30yrs to 350+ (!)

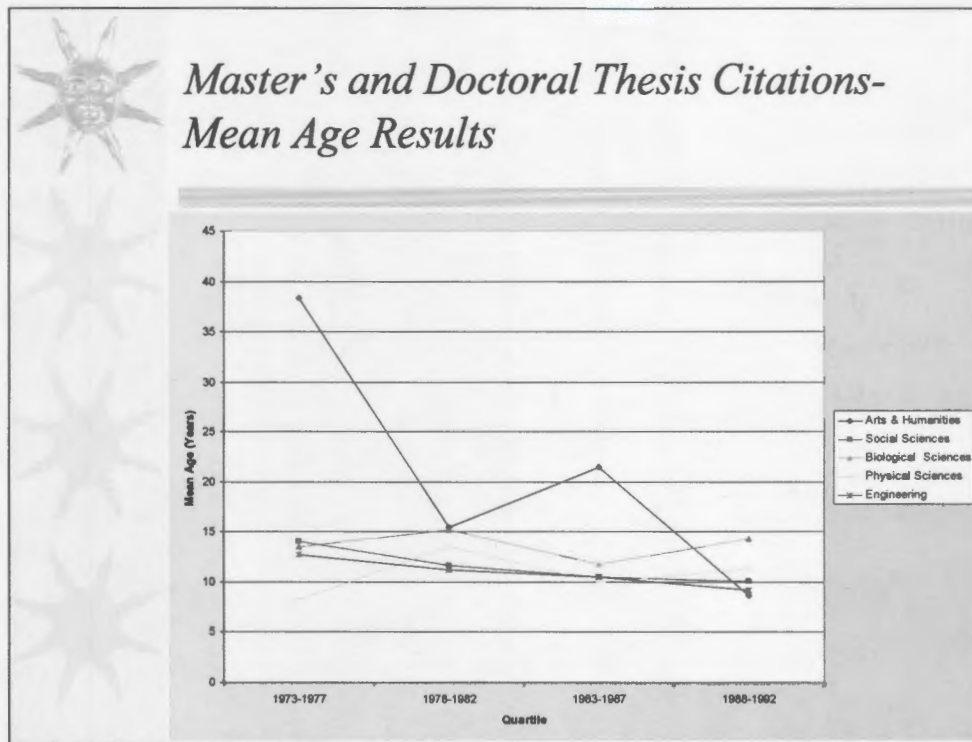


Jeff

Slide shows that doctoral theses are longer and contain more citations than their master's counterparts. Not surprising given that doctoral theses are generally more comprehensive.

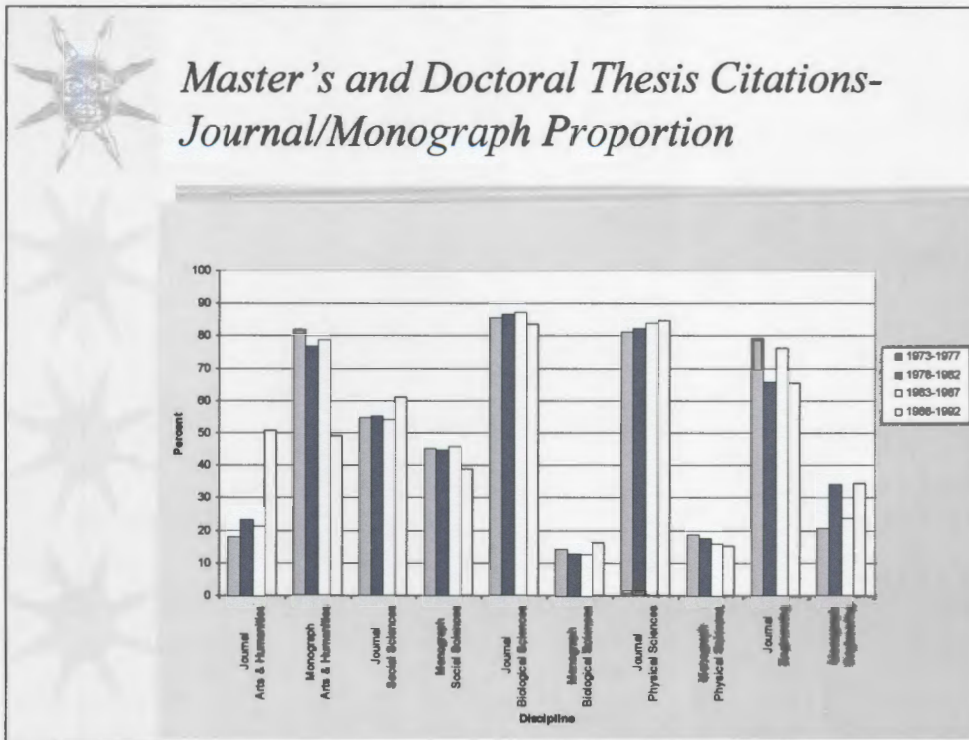
Large range for samples, but:

- 75% of samples fall in a smaller range
- Box and stem plot gives a better idea of the data's distribution than just giving means



Jeff

For the Subject areas except for Arts and Humanities, the mean ages drop over time. Reason for large variation is the small number of citations (200) in the Arts and Humanities sample.



Jeff

Chart shows that Sciences are consistently citing high percentage of journal articles.

Arts and Humanities increase may be due to:

- Increase in number of journals
- Increase in A&H programs and funding at ISU

Engineering difference may be due to use of conference proceedings. CP are sometimes classified as journals, but were not for this project.



Master's and Doctoral Thesis Citations-Main Findings

- ★ Graduate students favor current research regardless of discipline
 - 50% less than 10 years old
 - 70% less than 13 years old
- ★ Journal/monograph usage is consistent in sciences over time
- ★ Increase in journal use in Arts and Humanities

Jeff



Master's and Doctoral Thesis Citations-Implications

- ★ Is this pattern of using current citations particular to thesis writers or is it indicative of a trend across scholarship in general?
- ★ Collection Development questions
 - Literature specific policies?
 - Change in RLG Conspectus categories?

Jeff



Master's and Doctoral Thesis Citations-Future Research

- ★ What are the core serials for ISU theses? Are there differences over time?
- ★ Has ownership of serials changed over time and within disciplines?
- ★ Are there differences in age, serials/monographs, etc at the program level as opposed to the broad disciplines areas?
- ★ How do web/online resources impacted graduate research?

Kathy

Core serials – 2nd Thesis paper

Ownership of serials -- Jeff also looking at use of serials over time. Do Ag Econ grad students use the same journals now that they did before the web?

Impact of online resources – difference in electronic citations between ISU (paper thesis submission) and Virginia Tech (ETD submission)




*Master's and Doctoral Thesis
Citations- Coming soon. . .!!*

★ Article to appear in July 2003 issue of *portal:
libraries and the academy*



★ Draft of article available at:

[http://www.public.iastate.edu/~kushkows/
Thesispaper.pdf](http://www.public.iastate.edu/~kushkows/Thesispaper.pdf)

Jeff



Master's and Doctoral Thesis Citations

 **Questions?** 

Kathy

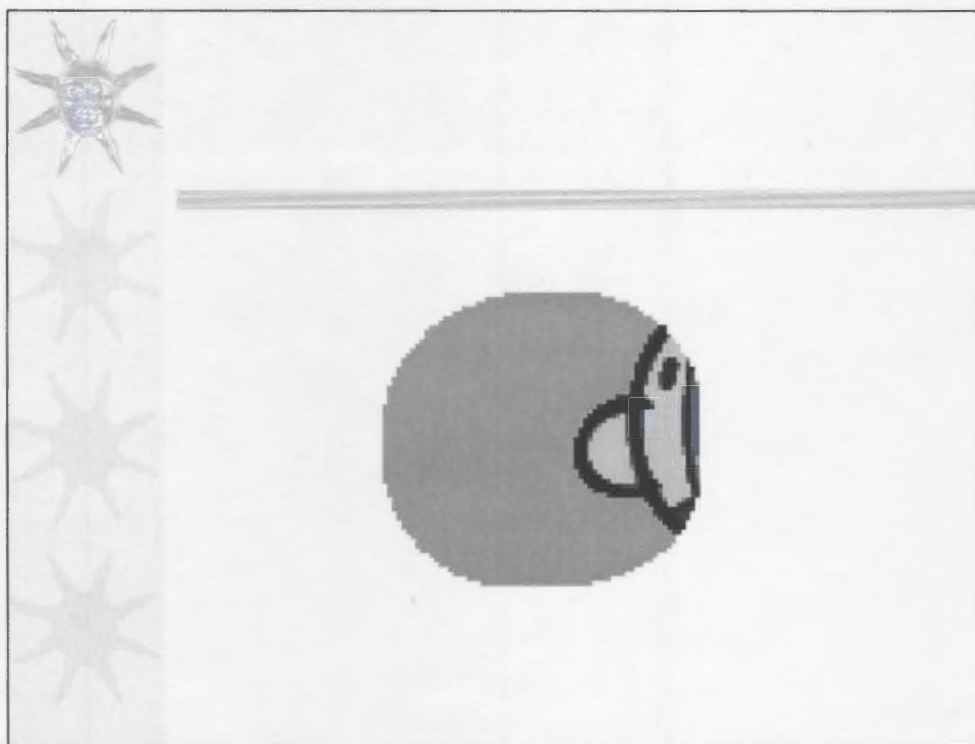


Master's and Doctoral Thesis Citations

Until next time! Thank-you!



Kathy



Kathy